

2. CVISN PROJECT CONTEXT AND ORGANIZATIONAL ENVIRONMENT

When referring to a professional discipline the literature uses “Project Management” not “Program Management”. For example, the name of the professional organization “Project Management Institute” [2]. The processes associated with the professional discipline of project management apply to program management as well, but at a higher level of abstraction and with a longer time horizon. To avoid cumbersome terminology in this Guide we will just say “Project Management” with the intention of broadly embracing “Program / Project Management”.

2.1 CVISN Project Management Processes

CVISN project management shares many of the same challenges as management of any other type of project (especially ITS projects). Any of the numerous project management textbooks (see Appendix A) will be beneficial supplementary reading. Reference [1] by the Project Management Institute is thorough yet surprisingly concise, and is available without charge. Reference [8] is very readable. Figure 2–1 portraying the lifecycle of project management processes is adapted from these references.

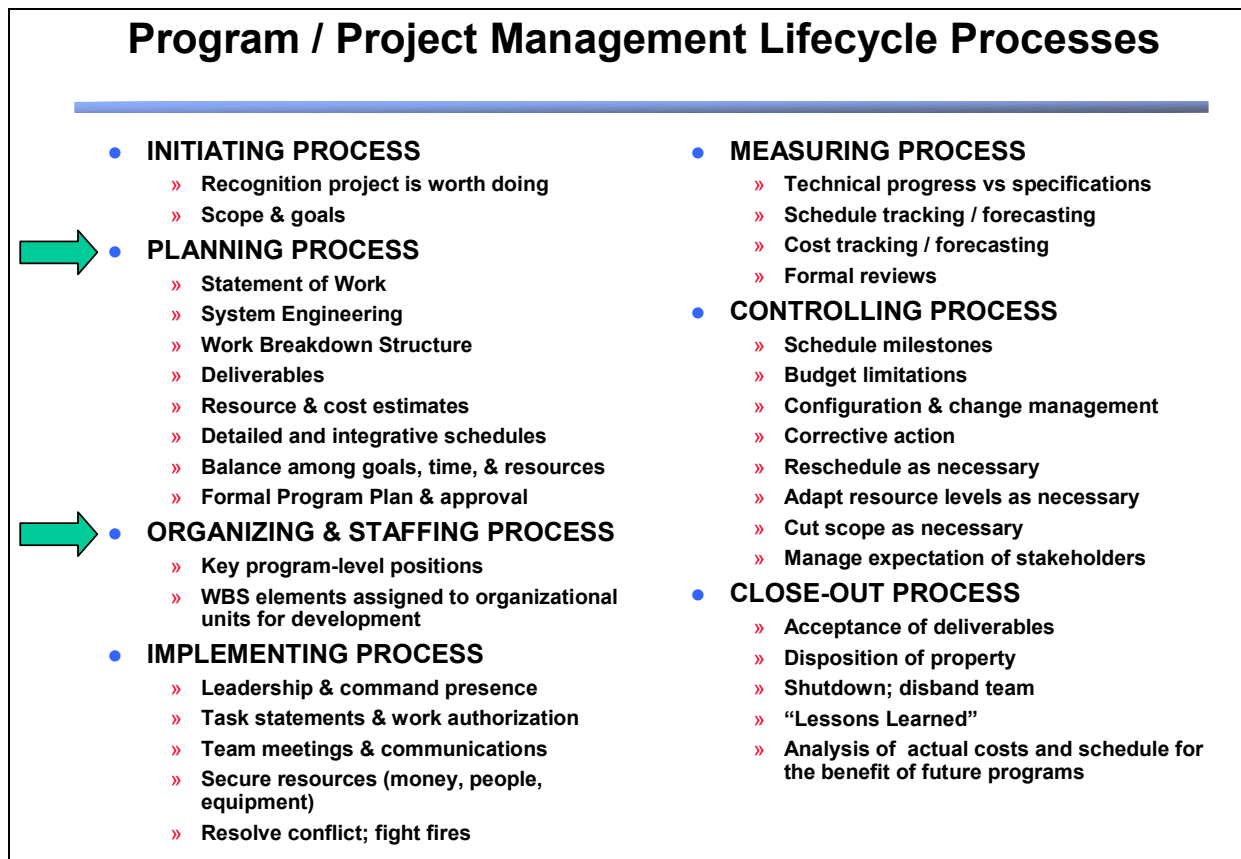


Figure 2-1. Planning and Organizing Is Just One Part of the Lifecycle

This Guide mostly focuses on the planning portion of the lifecycle. In this chapter we also discuss briefly some concepts related to organizing and staffing the program and projects.

Besides the stresses common to any project, CVISN project management presents unique challenges:

- Operating within the legislated and regulated environment of state government (which, for example, can slow down the process of getting developers under contract).
- Working within a line organizational structure, as opposed to a projectized or matrixed organizational structure.

In the next section, we will discuss conceptual models of staff organization structures, because the “matrix” organization of CVISN program and project teams may be a new concept, and because staffing is so critical to success.

2.2 CVISN May Introduce Matrix Management for the First Time

The recommended CVISN project management approach may introduce unfamiliar matrix management concepts into your state culture for the first time. People will need to adjust to this new way of thinking – that of project-focus rather than organizational-focus and of reporting to two or more chains of command. People may have trouble adapting when they have multiple managers, multiple role identities, and multiple priorities.

Organizations can be defined as groups of people who must coordinate their activities in order to meet organizational objectives [53]. The resulting staff structure determines the formal channels of authority, responsibility, and accountability. Organizations are continually restructured to meet the demands imposed by the environment.

Management textbooks identify three principal staff organization structures [8,53,58]:

- “Functional” or “Line” Organization
- “Projectized” or Product-Specific Organization
- “Matrixed” Organization

2.2.1 “Functional” or “Line” Organizational Structure

Under the traditional functional or line structure shown in Figure 2–2, specialists are grouped permanently by skill and role. The classic example is the military (thus the synonym “command-and-control” structure). State governments are organized this way, having a hierarchy of line management through departments and branches that can remain stable for decades. This serves extremely well for the delivery of stable on-going services, and when each project is clearly the responsibility of one department. On the other hand, the integration of activities that cross functional lines becomes a difficult chore, and top-level executives are forced to get involved with the daily routine to resolve conflict. There is no customer-facing focal point.

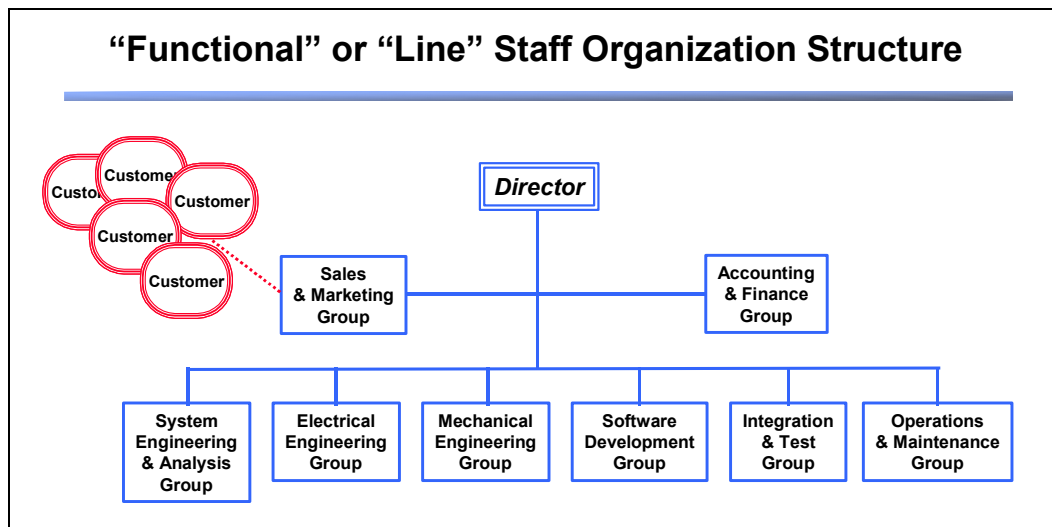


Figure 2-2. Illustrative “Functional” or “Line” Org Chart

2.2.2 “Projectized” or Product-Specific Organizational Structure

The product or projectized staff structure shown in Figure 2–3 evolves naturally when an organization has core long-duration product lines (such as aircraft engines), or long-duration projects (such as environmental cleanups lasting 20 years as opposed to information systems lasting only 2 years). Its advantages include quick reaction times and a strong customer-facing focal point. On the other hand, it is disruptive and inefficient when projects end because functional personnel do not “have a home” to return to.

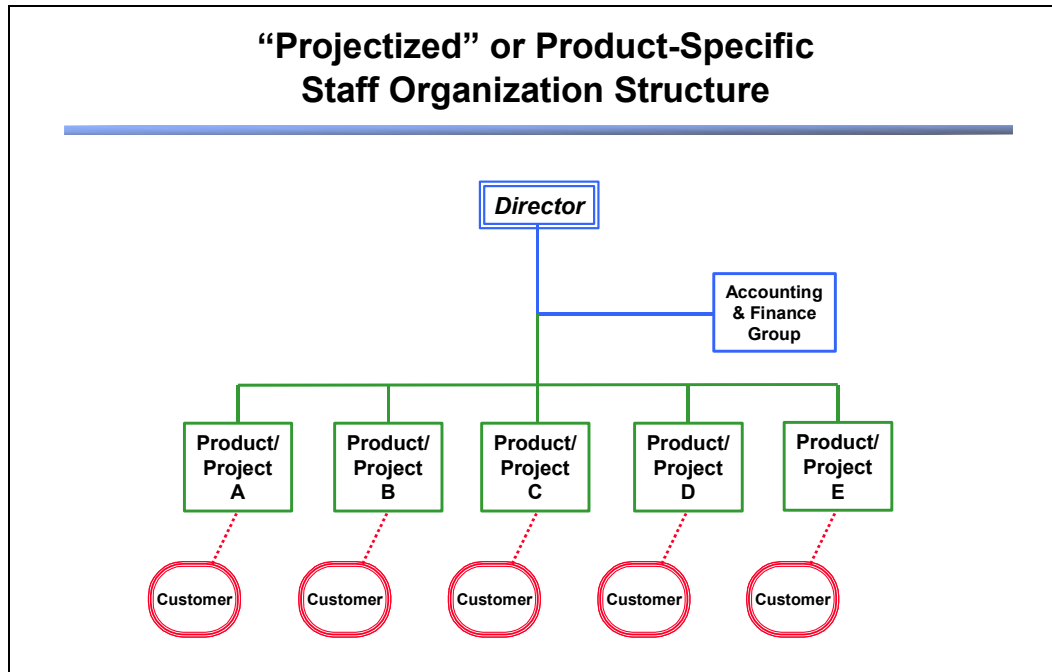


Figure 2-3. Illustrative “Projectized” or Product-Specific Org Chart

2.2.3 “Matrixed” Organizational Structure

Matrix management as shown in Figure 2–4 is an attempt to capture the advantages of both the pure functional structure and the pure product/project organization structure. With this strategy individuals are permanently assigned to specialty-focused stable “home” groups. Then for every project a dedicated but temporary project team is formed with individuals drawn from these specialty groups, thereby crossing organizational boundaries. Staff may be assigned full-time to one project, or part-time to several. The underlying assumption is that the enterprise has many simultaneously-active projects in various stages of their lifecycle. Engineering services companies are typically organized in this manner. Now a new staff senior assignment emerges, that of the full-time Project Manager (or “leader”) who has total responsibility, authority, and accountability for project success. Functional groups retain responsibility for staffing, developing personnel, and assuring the technical quality of the work done by those personnel. **You know you are in a matrixed organization when you have two bosses:** the project manager who provides day-to-day tasking, and the functional manager (or “line supervisor”) who handles career growth and evaluation, hiring and firing. A powerful advantage is that the project team can include all necessary areas of expertise ideally spanning the product’s lifecycle – for example, staff specializing in test or operations can be involved part-time right up front in the requirements and design phase. (This lifecycle approach is also called an Integrated Product Development Team.) Although not shown, a Program Manager may have oversight of several related projects.

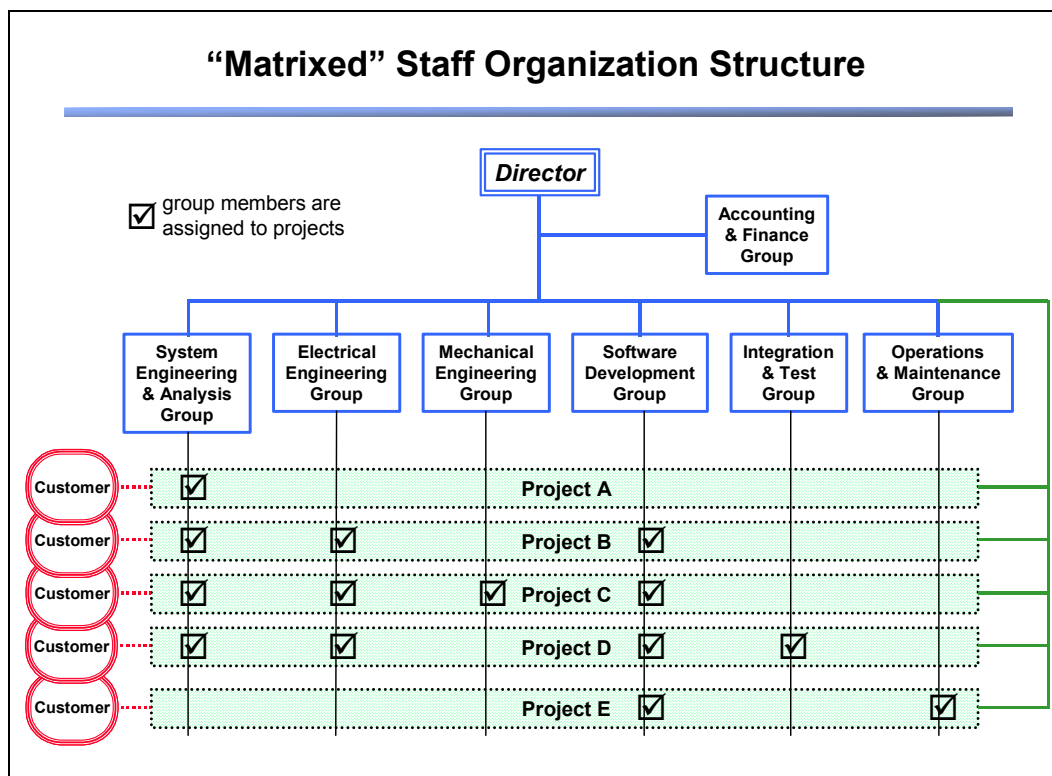


Figure 2-4. Illustrative “Matrixed” Org Chart

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